



**Commonwealth of Massachusetts**  
**Postemployment Benefits Other Than Pensions**  
GASB Statement Nos. 74/75 Valuation Report

Measurement Date of June 30, 2022

Prepared by Deloitte Consulting LLP

October 2022

# Contents

<b>Actuarial Valuation Opinion.....</b>	<b>1</b>
<b>Executive Summary.....</b>	<b>2</b>
<b>Background and Comments.....</b>	<b>3</b>
<b>GASB Nos. 74/75 Disclosures.....</b>	<b>6</b>
Schedule of Changes in Net OPEB Liability.....	6
Development of Fiscal Year Expense.....	7
Schedule of Deferred Outflows and Deferred Inflows of Resources.....	8
Schedule of Net OPEB Liability.....	9
<b>Basis for the Valuation.....</b>	<b>10</b>
Plan Participation Summary.....	10
Actuarial Experience.....	12
OPEB Plan Provisions Summary.....	13
GIC Benefits Provisions Summary.....	15
Actuarial Methods.....	20
Actuarial Assumptions.....	21
Rationale for Assumptions.....	27
<b>Development of June 30, 2022 Discount Rate.....</b>	<b>28</b>
<b>Glossary.....</b>	<b>33</b>

# Actuarial Valuation Opinion

This report presents results of the actuarial valuation of the Commonwealth of Massachusetts's Other Post-Employment Benefit Plan ("OPEB Plan" or "the Plan") measured as of June 30, 2022. In this report, we present disclosure information measured as of June 30, 2022 as required by Government Accounting Standards Board Statement Nos. 74 and 75 ("GASB Nos. 74/75"). In our opinion, this report is complete and accurate and represents fairly the actuarial position of the Plan for the purposes stated herein.

Actuarial information under GASB Nos. 74/75 is for purposes of fulfilling trust and employer financial accounting requirements. The results have been prepared on a basis consistent with our understanding of GASB Nos. 74/75 and are based upon assumptions prescribed by the Commonwealth of Massachusetts ("the Commonwealth"). Determinations for purposes other than meeting trust financial accounting requirements may be significantly different from the results reported herein.

The Commonwealth provided the participant data, financial information, and plan descriptions used in this valuation. The actuary has analyzed the data and other information provided for reasonableness but has not independently audited the data or other information provided. The actuary has no reason to believe the data or other information provided is not complete and accurate and knows of no further information that is essential to the preparation of the actuarial valuation.

In our opinion, all costs, liabilities, rates of interest, and other factors underlying these actuarial computations have been determined on the basis of actuarial assumptions and methods that are each reasonable (or consistent with authoritative guidance) for the purposes herein taking into account the experience of the Plan and future expectations.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operations of the methodology used for these measurements (such as the additional cost or contribution requirements based on the Plan's funded status); and changes in program provisions or applicable law. Our scope for this actuarial valuation did not include analyzing the potential range of such future measurements, and we did not perform that analysis.

The undersigned with actuarial credentials collectively meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

This report was prepared solely for the benefit and internal use of the plan sponsor. This report is not intended for the benefit of any other party and may not be relied upon by any third party for any purpose, and Deloitte Consulting accepts no responsibility or liability with respect to any party other than the plan sponsor.

To the best of our knowledge, no employee of the Deloitte U.S. Firms is an officer or director of the employer. In addition, we are not aware of any relationship between the Deloitte U.S. Firms and the employer that may impair or appear to impair the objectivity of the work detailed in this report.

DELOITTE CONSULTING LLP



---

Michael de Leon, FCA, ASA, EA, MAAA  
Managing Director



---

John Schubert, FCA, ASA, MAAA  
Specialist Leader



---

Jeannie Chen, FCA, ASA, EA, MAAA  
Specialist Leader

# Executive Summary

## Governmental Accounting Requirements and Report Purpose

The Governmental Accounting Standards Board released the Statement of Governmental Accounting Standards Nos. 74 and 75 in June 2015. GASB No. 74 establishes financial reporting requirements for OPEB plans that have assets accumulated in a trust or equivalent arrangement for the purpose of funding OPEB. GASB No. 75 details the reporting and disclosure requirements for employers with payables (OPEB liabilities) to employees of state and local governmental employers through defined benefit OPEB plans.

The purpose of this actuarial valuation report is to provide information for the Commonwealth's trust and employer financial reporting. The information provided herein will be used for the fiscal year ended June 30, 2022 for the GASB No. 74 disclosures and fiscal year ending June 30, 2023 for the GASB No. 75 disclosures (the Commonwealth has elected to use a measurement date as of the end of the prior fiscal year end for GASB No. 75).

## Summary of Results

The key results for the measurement period ended June 30, 2022 are:

- Net OPEB Liability (NOL) is \$13.4 billion, 231.3% of covered employee payroll.
- Plan Fiduciary Net Position (FNP) as a percentage of Total OPEB Liability (TOL), also known as the funded ratio, is 13.0%.

## Significant Changes from the Previous Actuarial Valuation

For the June 30, 2022 measurement, there was a decrease in TOL of \$2.6 billion compared to the previous valuation, with the change due to the following:

- There was an expected increase of \$0.8 billion due to the passage of time (service cost, interest, actual benefit payments, retiree contributions);
- There was a decrease of \$3.4 billion due to assumption changes, primarily due to the increase in the discount rate assumption from 2.77% to 4.30%;
- There was a decrease of \$0.02 billion due to actual experience over the past year being different than expected.

The effect of changes on the TOL is detailed in the Actuarial Experience section of this report.

# Background and Comments

## Overview of Plan

The Commonwealth administers a single employer defined benefit Other Post-Employment Benefit (OPEB) plan. Benefits are managed by the Group Insurance Commission (GIC) and investments are managed by PRIM. The GIC has representation on the Board of Trustees of the State Retirees' Benefits Trust (SRBT).

Under Chapter 32A of the Massachusetts General Laws (MGL) the Commonwealth is required to provide certain health care and life insurance benefits for retired employees of the Commonwealth, housing authorities, redevelopment authorities and certain other governmental agencies. Substantially all of the Commonwealth's employees may become eligible for these benefits upon reaching retirement age if they are eligible for a retirement allowance from the State Employees' Retirement System.

Eligible retirees are required to contribute a specified percentage of the health care/benefit costs based on the date of retirement. Employer and retiree contribution rates are set in MGL.

## Funding Policy

In addition to funding the pay-as-you-go cost of the OPEB Plan, the Commonwealth is required by statute to allocate to the SRBT a portion of revenue received under the Master Settlement Agreement with tobacco companies, increasing from 10% in FY14 to 100% by FY23. The percentage of tobacco settlement proceeds to be transferred to the SRBT in FY22 was set at 10% or approximately \$25 million, overriding existing statute. Based on recent contribution history, it is assumed that approximately \$50 million of tobacco settlement proceeds will be transferred to the SRBT in future years, subject to annual evaluation.

The SRBT is set up solely to fund OPEB benefits and the cost to administer those benefits. It can only be revoked when all such health care and other non-pension benefits, current and future, have been paid or defeased. GIC administers benefit payments, while the Trustees are responsible for reviewing the applications of entities that wish to invest their OPEB funds with PRIM. The SRBT is administered by the board of trustees and is reported as an OPEB Trust Fund and does not issue a stand-alone audited financial report.

The SRBT is required statutorily to invest in the PRIT Fund. The SRBT's target asset allocation as of June 30, 2022 is shown in the table below.

Asset Class	Target Allocation
Global Equity	33% - 43%
Core Fixed Income	12% - 18%
Value Added Fixed Income	5% - 11%
Private Equity	12% - 18%
Real Estate	7% - 13%
Timberland	1% - 7%
Portfolio Completion Strategies	7% - 13%
<b>Total</b>	<b>100%</b>

## Health Care Reform

The Patient Protection and Affordable Care Act ("PPACA") was signed into law on March 23, 2010. The primary objective of the act is to increase the number of Americans with health insurance coverage. There are several provisions within PPACA with potentially significant short- and long-term cost implications for employers. On December 18, 2015, the Consolidated Appropriations Act, 2016 became law. This legislation delayed the effective date of the high cost plan excise tax from 2018 to 2020 and made it tax deductible. On January 22, 2018, the Federal Register Printing Savings Act further delayed the effective date from 2020 to 2022. The excise tax on "Cadillac Plans" was repealed on December 20, 2019 so there is no longer any liability associated with this tax and it has been removed for purposes of determining the liabilities presented in this report. On December 20, 2019, the health insurance provider fee for calendar years beginning after December 31, 2020 were repealed. The health insurance provider fee remains only for calendar year 2020. In future years, there may continue to be increased cost impact to the extent the health & welfare program experiences increased utilization due to these changes, all of which are assumed to be in place indefinitely.

The provisions of PPACA considered are as follows:

- Prohibiting lifetime and annual limits on the dollar value of coverage for "essential health benefits"
- Increasing the dependent child age limit to age 26
- Elimination of cost sharing for in-network preventive services
- Reflecting manufacturer discounts available to certain Medicare beneficiaries receiving applicable covered Part D drugs (mostly brand) while in the coverage gap
- Out-of-pocket limit includes both medical and Rx expenses.

The impact of applicable provisions was incorporated in the per capita claims costs summarized in the Actuarial Assumptions section of this report.

## Actuarial Methods and Assumptions

The Public Employee Retirement Administration Commission (PERAC) performs experience studies of the Commonwealth of Massachusetts State Employees' Retirement System (SERS) periodically to determine reasonable and appropriate economic and demographic assumptions for purposes of valuing the defined benefit pension plan. The most recent SERS experience study covered the years 2006 through 2011 and was published in February 2014. The approved recommendations from that study were used to determine the assumptions for this valuation, where applicable. PERAC last updated the mortality projection scale in the January 1, 2021 SERS actuarial valuation to MP-2020. The long-term expected rate of return assumption of 7.00% as of June 30, 2022 is based on the assumption adopted by PERAC at the March 9, 2022 meeting for the Commonwealth's pension valuations, which includes SERS. Based on documentation provided by PERAC, the inflation assumption underlying the 7.00% long-term rate of return assumption is 2.50%. In addition, Deloitte reviews actuarial assumptions only applicable to the OPEB Plan outside of the experience study, such as medical trend rates and age-graded medical rates.

One significant assumption where the PERAC recommendations is not applicable to this OPEB Plan is the discount rate. For June 30, 2022, the single discount rate was based on the long-term expected rate of return on SRBT investments of 7.00% and a municipal bond rate of 3.54% (based on the 20-year Bond Buyer GO Index as of the end of June 2022). Based on the stated assumptions and the projection of cash flows, the Plan's Fiduciary Net Position and future contributions were not sufficient to finance the future benefit payments of the current plan members. Therefore, the long-term expected rate of return on SRBT investments was applied to projected benefit payments through year 2042 and the municipal bond rate was applied to all remaining future years to determine the Total OPEB Liability. The projection of cash flows used to determine the single discount rate for each fiscal year end assumed that employer contributions will be made based on the current funding policy for future years. The analysis is provided in the Development of June 30, 2022 Discount Rate section of this report.

The actuarial methods and assumptions are described in the Basis for the Valuation section of this report.

## Cash Costs vs. Implicit Rate Subsidy

GASB Nos. 74/75 require that employers recognize the expected claims of the retiree population less the expected contributions by those retirees. This is not necessarily the same determination as the expected cash payments of the employer for retiree health benefits. The difference is that many post-employment health plans (including the Commonwealth's OPEB Plan) charge the same premium rates for all participants in a non-Medicare plan regardless of their age. This single premium rate is called a blended premium rate because it blends the expected claims of both active and retired participants. Retirees are generally older than the average participant in a non-Medicare plan, which means they are expected to generate higher claims than the average participant of the plan; therefore, they are receiving a subsidy even if they pay 100% of the blended premium rate because they would be paying less in premiums than their expected claims costs. This subsidy is referred to as the "Implicit Rate Subsidy".

Another way of considering the Implicit Rate Subsidy is to assume the retirees were removed from a blended plan and, instead, separately rated. In this scenario, the premium rate for the remaining active population would be lower; therefore, the retirees' premium rate is being subsidized by the premiums for active employees. Since the employer generally pays a portion of the premiums for the active employees, this subsidy creates a liability for the employer.

By comparison, the cash costs are the actual dollars paid by the employer to cover a portion or all of the retirees' premium rates. This is sometimes referred to as the "Explicit Rate Subsidy". This is the benefit that is explicitly stated by the Commonwealth that will be paid on behalf of retirees.

# GASB Nos. 74/75 Disclosures

GASB Nos. 74/75 requires disclosure of notes to the financial statements and required supplementary information that includes information shown in this section.

## Schedule of Changes in Net OPEB Liability

(All dollar amounts are in thousands)

	Discount Rate	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a)-(b)
<b>Measurement Date of June 30, 2021</b>	<b>2.77%</b>	<b>\$ 17,910,405</b>	<b>\$ 1,910,940</b>	<b>\$ 15,999,465</b>
Service Cost		774,039		774,039
Interest		510,542		510,542
Changes In Benefit Terms		-		-
Changes In Assumptions - Discount Rate		(3,601,481)		(3,601,481)
Changes In Assumptions - Others		273,320		273,320
Differences Between Expected And Actual Experience		(16,054)		(16,054)
Benefit Payments*		(510,166)	(510,166)	-
Contributions - Employer	\$ 660,800		660,800	(660,800)
Contributions - Employee			-	-
Contributions - Retiree		-	-	-
Other Additions			175	(175)
Administrative Expenses			(240)	240
Net Investment Income				
Expected Investment Earnings	\$ 138,947			
Differences Between Projected And Actual Earnings		(212,073)		
Total			\$ (73,126)	\$ 73,126
Net Change		\$ (2,569,800)	\$ 77,443	\$ (2,647,243)
<b>Measurement Date of June 30, 2022</b>	<b>4.30%</b>	<b>\$ 15,340,605</b>	<b>\$ 1,988,383</b>	<b>\$ 13,352,222</b>
<b>Measurement Date</b>			<b>June 30, 2022</b>	<b>June 30, 2021</b>
Plan Fiduciary Net Position As A Percentage Of Total OPEB Liability			13.0%	10.7%
Covered Employee Payroll			\$ 5,772,086	\$ 5,594,324
Net OPEB Liability As A Percentage Of Covered Employee Payroll			231.3%	286.0%
<b>Sensitivity of Liability to Changes in Discount Rate</b>			<b>\$ Change</b>	<b>% Change</b>
A One Percentage point change in discount rate would have the following effect on Total OPEB Liability as of June 30, 2022:				
One Percent Increase (5.30%)			\$ (1,827,335)	-12%
One Percent Decrease (3.30%)			\$ 2,224,586	15%
Net OPEB Liability at a One Percentage point change in discount rate as of June 30, 2022 is as follows:				<b>Net OPEB Liability</b>
One Percent Increase (5.30%)				\$ 11,524,887
One Percent Decrease (3.30%)				\$ 15,576,808
<b>Sensitivity of Liability to Changes in Trend Rate</b>			<b>\$ Change</b>	<b>% Change</b>
A One Percentage point change in trend rate would have the following effect on Total OPEB Liability as of June 30, 2022:				
One Percent Increase (8.6% / 6.0% grading to 4.9%)			\$ 2,733,336	18%
One Percent Decrease (5.6% / 4.0% grading to 2.9%)			\$ (2,159,238)	-14%
Net OPEB Liability at a One Percentage point change in trend rate as of June 30, 2022 is as follows:				<b>Net OPEB Liability</b>
One Percent Increase (8.6% / 6.0% grading to 4.9%)				\$ 16,085,558
One Percent Decrease (6.6% / 4.0% grading to 2.9%)				\$ 11,192,984
<b>Key Assumptions</b>			<b>June 30, 2022</b>	<b>June 30, 2021</b>
Discount Rate			4.30%	2.77%
Investment Rate of Return			7.00%	7.00%
Inflation			2.50%	2.50%
Initial Medical Trend Rate			7.6% / 5.0%	7.3% / 4.4%
Ultimate Medical Trend Rate			3.9%	4.0%
Year Ultimate Trend Rate Reached			2075	2075

\*Benefit Payments reflect actual claims, including the effect of implicit subsidy, net of retiree contributions.



## Development of OPEB Expense for Fiscal Year Ending June 30, 2023 (Measurement Year June 30, 2022)

*(All dollar amounts are in thousands)*

Components of OPEB Expense	Measurement Year Ended 06/30/2022	Measurement Year Ended 06/30/2021
Service Cost	\$ 774,039	\$ 992,669
Interest	510,542	521,143
Expected Investment Earnings	(138,947)	(104,116)
Contributions - Employee	-	-
Administrative Expenses	240	247
Other	(175)	(200)
Changes In Benefit Terms	-	-
Recognition of Deferred Outflows and (Inflows)		
Changes in assumptions	(1,282,786)	(789,785)
Differences between expected and actual experience	(459,245)	(458,210)
Differences between expected and actual investment earnings	(2,653)	(53,067)
<b>OPEB Expense</b>	<b>\$ (598,985)</b>	<b>\$ 108,681</b>

Assumptions Used to Determine OPEB Expense	Measurement Year Ended 06/30/2022	Measurement Year Ended 06/30/2021
Assumptions as of Measurement Date	6/30/2021	6/30/2020
Discount Rate	2.77%	2.28%
Investment Rate of Return	7.00%	7.15%
Inflation	2.50%	2.50%
Initial Medical Trend Rate	7.3% / 4.4%	6.7% / 4.9%
Ultimate Medical Trend Rate	4.0%	4.0%
Year Ultimate Trend Rate Reached	2075	2075

## Schedule of Deferred Outflows and Deferred Inflows of Resources\*

(All dollar amounts are in thousands)

Measurement Date Established	Initial Amount	Deferred Outflows of Resources as of 06/30/2022	Deferred (Inflows) of Resources as of 06/30/2022**	Initial Years	Remaining Years	Outflows/(Inflows) Recognized in Measurement Year Ended 06/30/2022
Changes In Assumptions						
06/30/2017	\$ (2,393,745)	\$ -	\$ -	5.79	0.00	\$ (326,609)
06/30/2018	21,504	\$ 2,934	\$ -	5.79	0.79	3,714
06/30/2019	(1,935,139)	\$ -	\$ (584,255)	5.73	1.73	(337,721)
06/30/2020	2,050,139	\$ 980,501	\$ -	5.75	2.75	356,546
06/30/2021	(2,297,649)	\$ -	\$ (1,499,855)	5.76	3.76	(398,897)
06/30/2022	(3,328,161)	\$ -	\$ (2,748,342)	5.74	4.74	(579,819)
Total		\$ 983,435	\$ (4,832,452)			\$ (1,282,786)
Differences Between Expected And Actual Plan Experience						
06/30/2017	\$ (48,616)	\$ -	\$ -	5.79	0.00	\$ (6,634)
06/30/2018	218,891	\$ 29,866	\$ -	5.79	0.79	37,805
06/30/2019	715,192	\$ 215,931	\$ -	5.73	1.73	124,815
06/30/2020	(600,057)	\$ -	\$ (286,983)	5.75	2.75	(104,358)
06/30/2021	(2,926,517)	\$ -	\$ (1,910,365)	5.76	3.76	(508,076)
06/30/2022	(16,054)	\$ -	\$ (13,257)	5.74	4.74	(2,797)
Total		\$ 245,797	\$ (2,210,605)			\$ (459,245)
Net Difference Between Projected And Actual Earnings On Investments						
06/30/2018	(16,540)	\$ -	\$ -	5.00	0.00	(3,308)
06/30/2019	21,885	\$ 4,377	\$ -	5.00	1.00	4,377
06/30/2020	76,637	\$ 30,656	\$ -	5.00	2.00	15,327
06/30/2021	(307,322)	\$ -	\$ (184,394)	5.00	3.00	(61,464)
06/30/2022	212,073	\$ 169,658	\$ -	5.00	4.00	42,415
Total***		\$ 204,691	\$ (184,394)			\$ (2,653)
Contributions subsequent to measurement date****						
TBD						
<b>Balance as of 06/30/2022</b>		<b>\$ 1,433,923</b>	<b>\$ (7,227,451)</b>			<b>\$ (1,744,684)</b>
<b>Deferred Outflows And Deferred (Inflows) Of Resources Will Be Recognized In Expense As Follows:</b>						
<b>Measurement Year Ending:</b>						<b>Outflows/(Inflows)</b>
06/30/2023						\$ (1,416,852)
06/30/2024						(1,396,539)
06/30/2025						(1,319,498)
06/30/2026						(1,229,504)
06/30/2027						(431,135)
Thereafter						-

\*Deferred Outflows and Inflows of Resources established on or prior to June 30, 2019 were prepared by the prior plan actuary.

\*\* Deferred (Inflows) should be disclosed as positive numbers in the Annual Financial Report.

\*\*\* Per GASB 75 Paragraph 43.b, Deferred outflows of resources and deferred inflows of resources arising from differences between projected and actual OPEB plan investment earnings in different measurement periods should be aggregated and reported as a net deferred outflow of resources related to OPEB or a net deferred inflow or resources related to OPEB. Therefore, a net deferred outflow of \$20,297 is recognized as of June 30, 2022.

\*\*\*\* This will be recognized as a reduction in Net OPEB Liability next year.

## Schedule of Net OPEB Liability

(All dollar amounts are in thousands)

Measurement Year Ended*	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (c)	Plan Fiduciary Net Position As A Percentage Of Total OPEB Liability (d)	Covered Employee Payroll (e)	Net OPEB Liability As A Percentage Of Covered Employee Payroll (f)
			(a)-(b)	(b)/(a)		(c)/(e)
June 30, 2017	\$18,480,936	\$996,407	\$17,484,529	5.4%	\$5,927,012	295.0%
June 30, 2018	\$19,761,333	\$1,187,569	\$18,573,764	6.0%	\$5,296,859	350.7%
June 30, 2019	\$19,662,106	\$1,368,548	\$18,293,558	7.0%	\$5,491,214	333.1%
June 30, 2020	\$22,105,511	\$1,414,312	\$20,691,199	6.4%	\$5,625,684	367.8%
June 30, 2021	\$17,910,405	\$1,910,940	\$15,999,465	10.7%	\$5,594,324	286.0%
June 30, 2022	\$15,340,605	\$1,988,383	\$13,352,222	13.0%	\$5,772,086	231.3%

\*Information for measurement year ended on or prior to June 30, 2019 were prepared by the prior plan actuary.

# Basis for the Valuation

## Plan Participation Summary

The participant data used in the valuation was provided by the Commonwealth as of January 1, 2022. While the participant data was checked for reasonableness, the data was not audited, and the valuation results presented in this report are dependent upon the accuracy of the participant data provided. This section presents a summary of the basic participant information for the active, terminated vested, and retired participants covered under the terms of the Plan.

		Job Group				Total
		1	2	3	4	
a. Active Participants						
	Counts	58,613	1,898	1,891	5,916	68,318
	Average Age	48.5	49.1	41.8	41.9	47.8
	Average Service	13.2	16.1	15.3	13.2	13.3
b. Terminated Vested - Eligible for Participation						
	Counts	4,266				
	Average Age	53.0				
		Former	Dependent			
c. Retired Participants		Employees <sup>1</sup>	Spouses			
	Counts					
	Under Age 65 Non-Medicare	11,564	8,242			
	Under Age 65 Medicare	240	273			
	Over Age 65 Non-Medicare	4,114	415			
	Over Age 65 Medicare	44,157	17,313			
	Total Counts <sup>2</sup>	60,075	26,243			
	Average Age	73.1	68.9			
d. Total Participants <sup>3</sup>		132,659				

<sup>1</sup>Former employees include 52,932 retirees and disabled participants and 7,143 surviving spouses.

<sup>2</sup>Retired participants cover 7,337 dependent children in addition to the total counts.

<sup>3</sup>Total participant count includes active participants, vested terminated participants, and former employees.

## Plan Participation Summary (cont.)

Distribution of Service Groups by Age Groups									
Age Group	Retired Participant	Active Participants - Years of Service							Total
		0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	
<25	1	484	-	-	-	-	-	-	484
25-29	-	4,152	751	2	-	-	-	-	4,905
30-34	11	3,952	3,159	491	3	-	-	-	7,605
35-39	34	2,578	2,792	1,949	639	5	-	-	7,963
40-44	94	1,764	2,047	1,611	1,688	485	3	-	7,598
45-49	305	1,400	1,441	1,350	1,493	1,724	394	13	7,815
50-54	1,188	1,387	1,488	1,304	1,605	1,951	1,530	709	9,974
55-59	3,109	1,105	1,295	1,127	1,327	1,617	1,308	1,961	9,740
60-64	7,062	709	1,040	911	1,107	1,221	997	1,648	7,633
65-69	11,265	221	480	447	506	592	398	682	3,326
70+	37,006	45	104	144	197	198	136	451	1,275
<b>Total</b>	<b>60,075</b>	<b>17,797</b>	<b>14,597</b>	<b>9,336</b>	<b>8,565</b>	<b>7,793</b>	<b>4,766</b>	<b>5,464</b>	<b>68,318</b>

## Actuarial Experience

Actuarial gains and losses arise from experience different from that assumed, changes in actuarial assumptions and methods, and changes in plan provisions. The following summarizes the changes in the Total OPEB Liability due to these sources from June 30, 2021 to June 30, 2022. Dollar amounts are in thousands.

1. Total OPEB Liability as of June 30, 2021		\$17,910,405
2. Service Cost for year ending June 30, 2022		\$774,039
3. Actual Benefit Payments for the year ended June 30, 2022		(\$510,166)
4. Interest at 2.77% on (1), (2) and (3)		\$510,542
5. Expected Total OPEB Liability as of June 30, 2022		\$18,684,820
(1) + (2) + (3) + (4)		
6. (Gain)/Loss		
i. Assumption Changes - Discount Rate was increased from 2.77% to 4.30% (based on a blend of the Bond Buyer Index rate of 3.54% and the expected rate of return on assets of 7.00%)	(3,601,481)	
ii. Assumption Changes - Others	273,320	
a. Healthcare trend rates were updated to reflect short-term expectations based on a review of the Commonwealth's historical trend rates during the past two fiscal years, industry surveys, and an adjustment to estimate the impact of recent general inflation. Long-term expectations were updated based on the most recent SOA-Getzen trend model.	273,320	
iii. Experience	(16,054)	
a. Per capita claims costs were updated to reflect FY23 rates, including the discontinuation of the Fallon Direct and Select plans as of FY23	(138,744)	
b. Demographic and benefit payment experience	122,690	
iv. Total (Gain)/Loss		(3,344,215)
7. Actual Total OPEB Liability as of June 30, 2022		\$15,340,605
(5) + (6)(iv)		

## OPEB Plan Provisions Summary

This section summarizes overall provisions for the OPEB Plan.

### Covered Employees

Commonwealth retirees entitled to a pension or retirement allowance from SERS may continue Basic Life and Health Insurance coverage, and Additional Life Insurance by applying to continue the coverage and continue paying the required premium. Membership in the SERS is mandatory for nearly all state employees who are regularly employed on a part-time (minimum of half-time) or full-time permanent basis. SERS also covers active and retirees who are non-Commonwealth employees.

There are four group classifications in SERS:

**Group 1:** Officials and general employees including clerical, administrative and technical workers, laborers, mechanics, and all others not otherwise classified

**Group 2:** Probation officers, court officers, certain correctional positions whose major duties require them to have the care, custody, instruction or supervision of prisoners, and certain positions who provide direct care, custody, instruction, or supervision of persons with mental illness or developmental disabilities

**Group 3:** State police officers

**Group 4:** Certain public safety officers and officials, correction officers and certain other correction positions, and parole officers or parole supervisors

### Covered Family Members

Spouses and dependents are eligible for subsidized Health Insurance coverage while the retiree is alive. Surviving spouses may elect to remain insured only for Health Insurance coverage until their remarriage or death.

### Eligibility

Eligible employees who meet one of the following SERS eligibility criteria are eligible to receive subsidized Basic Life and Health Insurance coverage.

#### ***Superannuation Retirement***

- An employee hired before April 2, 2012:
  - completion of 20 years of creditable service; or
  - attainment of age 55 if hired prior to 1978 or classified in Group 4; or
  - attainment of age 55 with 10 years of service, if hired after 1978, and classified in Group 1 or 2
- An employee hired on or after April 2, 2012:
  - attainment of age 60 with 10 years of creditable service if classified in Group 1; or
  - attainment of age 55 with 10 years of creditable service if classified in Group 2; or
  - attainment of age 55 if classified in Group 4
- An employee classified in Group 3:
  - completion of 20 years of creditable service; or
  - attainment of age 55

#### ***Deferred Vested***

Deferred retirees (eligible employees who have at least ten years of full-time creditable service upon termination) retain the right to receive a retirement allowance from SERS so long as they do not withdraw their pension monies from SERS.

## OPEB Plan Provisions Summary (cont.)

### ***Disability Retirement***

Ordinary Disability: Non-veterans who become totally and permanently disabled by reason of a non-job related condition with at least ten years of creditable service

Accidental Disability: Applies to members who became permanently and totally unable to perform the essential duties of the position as a result of a personal injury sustained or hazard undergone while in the performance of duties. There is no minimum age or service requirement.

### ***Death in Active Service***

If a participant dies during active service and had GIC health coverage, their survivor is eligible to continue health coverage.

### **Retiree Contributions**

Eligible retirees and surviving spouses are required to contribute a specified percentage of the health care/benefit costs, as determined by the GIC.

- Retirements on or before July 1, 1994: 10%
- Retirements after July 1, 1994 and on or before October 1, 2009: 15%
- Retirements after October 1, 2009: 20%
- Surviving spouses of deceased retirees, regardless of retirement date: 10%

### **Changes in OPEB Plan Provisions**

None.



## GIC Benefits Provisions Summary

This section summarizes the various medical and prescription drug plans, and life insurance coverage offered by the GIC effective July 1, 2022.

### Non-Medicare Medical Plans

The following tables list the non-Medicare medical plans and sample 10% retiree contribution rate effective July 1, 2022 offered to retirees and provide the basic benefit provisions.

Medical	Benefit Provisions		Sample 10% Monthly Retiree Contribution Rate
<b>UniCare State Indemnity Plan/Basic with CIC (Comprehensive)</b>  <i>Indemnity</i>	Out-of-pocket Maximum Fiscal Year Deductible Primary Care Provider Office Visit Specialist Physician Office Visit  Retail Clinic and Urgent Care Center Emergency Room Care	\$5,000 individual, \$10,000 family \$500 individual, \$1,000 family \$20/visit Tier 1: \$30/visit Tier 2: \$60/visit Tier 3: \$60/visit \$20/visit \$100/visit (waived if admitted)	<u>With CIC</u> Individual: \$177.27 Family: \$395.96 <u>Without CIC</u> Individual: \$118.28 Family: \$261.65
<b>UniCare State Indemnity Plan/PLUS</b>  <i>PPO-Type</i>	Out-of-pocket Maximum Fiscal Year Deductible Primary Care Provider Office Visit  Specialist Physician Office Visit  Retail Clinic and Urgent Care Center Emergency Room Care	\$5,000 individual, \$10,000 family \$500 individual, \$1,000 family Centered Care PCPs: \$15/visit Other PCPs: \$20/visit Tier 1: \$30/visit Tier 2: \$60/visit Tier 3: \$75/visit \$20/visit \$100/visit (waived if admitted)	Individual: \$81.54 Family: \$193.94
<b>Tufts Health Plan Navigator</b>  <i>POS</i>	Out-of-pocket Maximum Fiscal Year Deductible Primary Care Provider Office Visit  Specialist Physician Office Visit  Retail Clinic and Urgent Care Center Emergency Room Care	\$5,000 individual, \$10,000 family \$500 individual, \$1,000 family Tier 1: \$10/visit Tier 2: \$20/visit Tier 3: \$40/visit Tier 1: \$30/visit Tier 2: \$60/visit Tier 3: \$75/visit \$20/visit \$100/visit (waived if admitted)	Individual: \$89.49 Family: \$218.30

## GIC Benefits Provisions Summary (cont.)

Medical	Benefit Provisions	Sample 10% Monthly Retiree Contribution Rate
<b>Harvard Pilgrim Independence Plan</b>  <i>POS</i>	Out-of-pocket Maximum      \$5,000 individual, \$10,000 family Fiscal Year Deductible      \$500 individual, \$1,000 family Primary Care Provider Office Visit      Tier 1: \$10/visit Tier 2: \$20/visit Tier 3: \$40/visit Specialist Physician Office Visit      Tier 1: \$30/visit Tier 2: \$60/visit Tier 3: \$75/visit Retail Clinic and Urgent Care Center      Retail Clinic: \$10/visit Urgent Care: \$20/visit Emergency Room Care      \$100/visit (waived if admitted)	Individual: \$103.93 Family: \$253.35
<b>Health New England</b>  <i>HMO</i>	Out-of-pocket Maximum      \$5,000 individual, \$10,000 family Fiscal Year Deductible      \$400 individual, \$800 family Primary Care Provider Office Visit      \$20/visit Specialist Physician Office Visit      Tier 1: \$30/visit Tier 2: \$60/visit Tier 3: N/A Retail Clinic and Urgent Care Center      \$20/visit Emergency Room Care      \$100/visit (waived if admitted)	Individual: \$67.41 Family: \$160.37
<b>AllWays Health Partners Complete HMO</b>  <i>HMO</i>	Out-of-pocket Maximum      \$5,000 individual, \$10,000 family Fiscal Year Deductible      \$500 individual, \$1,000 family Primary Care Provider Office Visit      \$20/visit Specialist Physician Office Visit      Tier 1: \$30/visit Tier 2: \$60/visit Tier 3: N/A Retail Clinic and Urgent Care Center      \$20/visit Emergency Room Care      \$100/visit (waived if admitted)	Individual: \$84.83 Family: \$221.14

## GIC Benefits Provisions Summary (cont.)

Medical	Benefit Provisions		Sample 10% Monthly Retiree Contribution Rate
<b>UniCare State Indemnity Plan/Community Choice</b>  <i>PPO-Type</i>	Out-of-pocket Maximum Fiscal Year Deductible Primary Care Provider Office Visit  Specialist Physician Office Visit  Retail Clinic and Urgent Care Center Emergency Room Care	\$5,000 individual, \$10,000 family \$400 individual, \$800 family Centered Care PCPs: \$15/visit Other PCPs: \$20/visit Tier 1: \$30/visit Tier 2: \$60/visit Tier 3: \$75/visit \$20/visit \$100/visit (waived if admitted)	Individual: \$62.84 Family: \$155.52
<b>Tufts Health Plan Spirit</b>  <i>EPO (HMO-Type)</i>	Out-of-pocket Maximum Fiscal Year Deductible Primary Care Provider Office Visit Specialist Physician Office Visit  Retail Clinic and Urgent Care Center Emergency Room Care	\$5,000 individual, \$10,000 family \$400 individual, \$800 family \$20/visit Tier 1: \$30/visit Tier 2: \$60/visit Tier 3: \$75/visit \$20/visit \$100/visit (waived if admitted)	Individual: \$68.01 Family: \$163.61
<b>Harvard Pilgrim Primary Choice Plan</b>  <i>HMO</i>	Out-of-pocket Maximum Fiscal Year Deductible Primary Care Provider Office Visit Specialist Physician Office Visit  Retail Clinic and Urgent Care Center Emergency Room Care	\$5,000 individual, \$10,000 family \$400 individual, \$800 family \$20/visit Tier 1: \$30/visit Tier 2: \$60/visit Tier 3: N/A \$20/visit \$100/visit (waived if admitted)	Individual: \$75.09 Family: \$191.03

## GIC Benefits Provisions Summary (cont.)

### Medicare Medical Plans

The following tables list the Medicare medical plans and sample 10% retiree contribution rate effective July 1, 2022 offered to retirees and provide the basic benefit provisions.

Medical	Benefit Provisions		Sample 10% Monthly Retiree Contribution Rate
<b>Tufts Health Plan Medicare Preferred</b>  <i>HMO</i>	Calendar Year Deductible Physician's Office Visit (except behavioral health) Retail Clinic Emergency Room Care (includes out-of-area)	None \$15/visit \$15/visit \$50/visit (waived if admitted)	\$35.08 per person
<b>Tufts Health Plan Medicare Complement</b>  <i>Indemnity</i>	Calendar Year Deductible Physician's Office Visit (except behavioral health) Retail Clinic Emergency Room Care (includes out-of-area)	None \$15/visit \$15/visit \$50/visit (waived if admitted)	\$41.12 per person
<b>Harvard Pilgrim Medicare Enhance</b>  <i>Indemnity</i>	Calendar Year Deductible Physician's Office Visit (except behavioral health) Retail Clinic Emergency Room Care (includes out-of-area)	None \$15/visit \$15/visit \$50/visit (waived if admitted)	\$42.91 per person
<b>Health New England Medicare Supplement Plus</b>  <i>Indemnity</i>	Calendar Year Deductible Physician's Office Visit (except behavioral health) Retail Clinic Emergency Room Care (includes out-of-area)	None \$15/visit \$15/visit \$50/visit (waived if admitted)	\$43.54 per person
<b>UniCare State Indemnity Plan Medicare Extension (OME) with CIC (Comprehensive)</b>  <i>Indemnity</i>	Calendar Year Deductible Physician's Office Visit (except behavioral health) Retail Clinic Emergency Room Care (includes out-of-area)  Without CIC, deductibles are higher and coverage is only 80% for some services.	None \$10/visit \$10/visit \$50/visit (waived if admitted)	With CIC \$52.04 per person Without CIC \$40.72 per person

## **GIC Benefits Provisions Summary (cont.)**

### **Prescription Drug**

Prescription Drug Deductible: \$100 for individual coverage and \$200 for family coverage, separate from the health plan deductible. Once the prescription drug deductible is reached, covered prescriptions are subject to a copay.

The co-payments for all prescriptions covered by the plan are:

Retail (30-day supply): \$10 Tier 1 / \$30 Tier 2 / \$65 Tier 3

Mail Order Maintenance Drugs (90-day supply): \$25 Tier 1 / \$75 Tier 2 / \$165 Tier 3

### **Life Insurance**

\$5,000 in basic life insurance coverage.

Sample 10% retiree contribution rate: \$0.64/month

### **Changes in GIC Benefits Provisions**

Fallon Health Select Care and Fallon Health Direct Care, both non-Medicare medical plans, were discontinued effective June 30, 2022. Fallon plans' (HMO) members are assumed to migrate to the UniCare Plus plan (PPO).

## **Actuarial Methods**

### **Actuarial Cost Method**

The Actuarial Cost Method used to determine the Total OPEB Liability is the Entry Age Normal (EAN) method as prescribed by GASB Nos. 74/75. This method is in the family of future benefit cost methods, which requires an estimate of the projected benefit payable at retirement to determine costs and liabilities.

The Normal Cost (or Service Cost) is the annual allocation required for each participant from entry date to the assumed retirement date so that the accumulated allocation at retirement is equal to the liability for the projected benefit. The projected benefits are based on estimates of future years of service and projected health benefit costs. The normal cost is developed as a level percent of compensation as prescribed by GASB Nos. 74/75.

The Present Value of Future Benefits is equal to the value of the projected benefit payable at retirement discounted back to the participant's current age. Discounts include such items as interest and mortality. The present value of future normal cost allocations is equal to the discounted value of the normal costs allocated from the participant's current age to retirement age.

The difference between the Present Value of Future Benefits and the Present Value of Future Normal Cost allocations represents the Total OPEB Liability at the participant's current age.

The Total OPEB Liability for participants currently receiving payments is calculated as the actuarial present value of future benefits expected to be paid. No normal cost is allocated for these participants.

### **Financial and Census Data**

The Commonwealth of Massachusetts provided the participant data, financial information and plan descriptions used in this valuation. The actuary has checked the data for reasonableness but has not independently audited the data. The actuary has no reason to believe the data is not complete and accurate and knows of no further information that is essential to the preparation of the actuarial valuation.

### **Plan Fiduciary Net Position**

Market Value of Assets as of the measurement date.

### **Census Date**

January 1, 2022.

### **Measurement Date**

June 30, 2022.

### **Method Changes Since Prior Valuation**

None.

# Actuarial Assumptions

## Economic Assumptions

The economic assumptions were selected for consistency with SERS where applicable. The discount rate was selected based on the requirements prescribed in GASB Nos. 74/75.

Discount Rate	4.30% (2.77% in 2021)																																																								
Long-Term Expected Rate of Return <sup>1</sup>	7.00%																																																								
Inflation <sup>1</sup>	2.50%																																																								
Payroll Growth <sup>1</sup>	4.00%																																																								
Salary Scale <sup>1</sup>	<p>Percent of salary increases each year is based on Group classifications and years of service.</p> <table><tr><th colspan="4">Salary Increases (%)</th></tr><tr><th>Service</th><th>Groups 1 and 2</th><th>Group 3</th><th>Group 4</th></tr><tr><td>0</td><td>7.00</td><td>7.00</td><td>9.00</td></tr><tr><td>1</td><td>6.50</td><td>7.00</td><td>8.00</td></tr><tr><td>2</td><td>6.00</td><td>7.00</td><td>7.50</td></tr><tr><td>3</td><td>5.50</td><td>7.00</td><td>7.00</td></tr><tr><td>4</td><td>5.50</td><td>6.75</td><td>6.75</td></tr><tr><td>5</td><td>5.25</td><td>6.25</td><td>6.25</td></tr><tr><td>6</td><td>5.00</td><td>5.25</td><td>5.75</td></tr><tr><td>7</td><td>4.75</td><td>4.75</td><td>5.25</td></tr><tr><td>8-12</td><td>4.75</td><td>4.75</td><td>4.75</td></tr><tr><td>13-15</td><td>4.50</td><td>4.75</td><td>4.75</td></tr><tr><td>16-19</td><td>4.25</td><td>4.75</td><td>4.75</td></tr><tr><td>20+</td><td>4.00</td><td>4.50</td><td>4.50</td></tr></table>	Salary Increases (%)				Service	Groups 1 and 2	Group 3	Group 4	0	7.00	7.00	9.00	1	6.50	7.00	8.00	2	6.00	7.00	7.50	3	5.50	7.00	7.00	4	5.50	6.75	6.75	5	5.25	6.25	6.25	6	5.00	5.25	5.75	7	4.75	4.75	5.25	8-12	4.75	4.75	4.75	13-15	4.50	4.75	4.75	16-19	4.25	4.75	4.75	20+	4.00	4.50	4.50
Salary Increases (%)																																																									
Service	Groups 1 and 2	Group 3	Group 4																																																						
0	7.00	7.00	9.00																																																						
1	6.50	7.00	8.00																																																						
2	6.00	7.00	7.50																																																						
3	5.50	7.00	7.00																																																						
4	5.50	6.75	6.75																																																						
5	5.25	6.25	6.25																																																						
6	5.00	5.25	5.75																																																						
7	4.75	4.75	5.25																																																						
8-12	4.75	4.75	4.75																																																						
13-15	4.50	4.75	4.75																																																						
16-19	4.25	4.75	4.75																																																						
20+	4.00	4.50	4.50																																																						

<sup>1</sup> For consistency with the pension plan of which these participants are members, these assumptions are based on those used for the SERS Actuarial Valuation Report as of January 1, 2022 and experience study issued in 2014.

## Actuarial Assumptions (cont.)

### Demographic Assumptions

The demographic assumptions were selected for consistency with SERS where applicable. The retiree health specific assumptions were selected based on recent experience.

Mortality <sup>1</sup>	<p><b>Pre-Retirement Mortality:</b></p> <p>RP-2014 Blue Collar Employees table projected generationally with Scale MP-2020 set forward 1 year for females.</p> <p><b>Post-Retirement Mortality:</b></p> <p>RP-2014 Blue Collar Healthy Annuitant table projected generationally with Scale MP-2020 set forward 1 year for females. For disabled retirees, table is set forward 1 year.</p>																																													
Disability Incidence <sup>1</sup>	<p>Percent of employees expected to become disabled each year is based on Group classifications and age.</p> <table><tr><th colspan="5">Sample Disability Rates (%)</th></tr><tr><th>Age</th><th>Group 1</th><th>Group 2</th><th>Group 3</th><th>Group 4</th></tr><tr><td>25</td><td>0.01</td><td>0.062</td><td>0.11</td><td>0.20</td></tr><tr><td>30</td><td>0.01</td><td>0.072</td><td>0.16</td><td>0.21</td></tr><tr><td>35</td><td>0.034</td><td>0.10</td><td>0.23</td><td>0.40</td></tr><tr><td>40</td><td>0.068</td><td>0.21</td><td>0.36</td><td>0.71</td></tr><tr><td>45</td><td>0.10</td><td>0.30</td><td>0.58</td><td>1.00</td></tr><tr><td>50</td><td>0.133</td><td>0.42</td><td>0.94</td><td>1.10</td></tr><tr><td>55</td><td>0.14</td><td>0.50</td><td>1.90</td><td>0.80</td></tr></table>	Sample Disability Rates (%)					Age	Group 1	Group 2	Group 3	Group 4	25	0.01	0.062	0.11	0.20	30	0.01	0.072	0.16	0.21	35	0.034	0.10	0.23	0.40	40	0.068	0.21	0.36	0.71	45	0.10	0.30	0.58	1.00	50	0.133	0.42	0.94	1.10	55	0.14	0.50	1.90	0.80
Sample Disability Rates (%)																																														
Age	Group 1	Group 2	Group 3	Group 4																																										
25	0.01	0.062	0.11	0.20																																										
30	0.01	0.072	0.16	0.21																																										
35	0.034	0.10	0.23	0.40																																										
40	0.068	0.21	0.36	0.71																																										
45	0.10	0.30	0.58	1.00																																										
50	0.133	0.42	0.94	1.10																																										
55	0.14	0.50	1.90	0.80																																										

<sup>1</sup> For consistency with the pension plan of which these participants are members, these assumptions are based on those used for the SERS Actuarial Valuation Report as of January 1, 2022 and experience study issued in 2014.



## Actuarial Assumptions (cont.)

### Withdrawal<sup>1</sup>

Percent of employees expected to terminate each year is based on Group classifications, age and years of service. No withdrawal is assumed after a member is first assumed to retire.

**Sample Withdrawal Rates (%)**

Age	Group 1 and 2										
	Years of Service										
	0	1	2	3	4	5	6	7	8	9	10+
20	27.0	25.0	22.0	15.0	15.0	12.0	9.0	8.0	8.0	6.0	4.5
25	25.0	22.0	19.0	14.0	13.0	11.0	9.0	8.0	8.0	6.0	4.5
30	23.0	18.0	15.0	13.0	12.0	10.0	9.0	8.0	5.5	5.5	4.5
35	18.0	14.0	13.0	12.0	11.0	9.0	8.0	6.5	5.0	5.0	3.3
40	16.0	12.0	11.0	9.5	9.0	8.0	7.0	6.0	4.5	3.5	3.0
45	15.0	10.0	8.5	8.0	7.0	7.0	5.5	5.0	4.0	3.5	3.0
50	18.0	9.0	8.0	7.0	6.5	6.0	5.0	5.0	3.5	3.0	3.0
55	18.0	10.0	8.0	6.0	6.0	5.0	4.0	4.0	3.0	2.5	0.0*
60	18.0	10.0	8.0	7.5	7.5	5.0	5.0	3.5	3.5	3.5	0.0
65+	25.0	15.0	15.0	15.0	15.0	12.0	10.0	10.0	8.0	7.0	0.0

\* For members hired on or after April 2, 2012, probability of withdrawal is 3.0% for ages 55 to 59 with 10+ years of service.

Group	All Ages				
	Years of Service				
	1	5	10	15	20+
3	0.7	0.7	0.5	0.5	0.5
4	9.0	6.0	3.5	2.0	1.5

### Retirement<sup>1</sup>

Percent of employees expected to retire each year is based on Group classifications, age and years of service.

**Sample Retirement Rates (%)**

Age	Group 1		Group 2		Group 3		Group 4	
	Male	Female	Male	Female	Male	Female	Male	Female
50*	3.0	3.0	2.0	2.0	5.0	5.0	6.0	6.0
55*	3.5	5.0	7.5	7.5	10.0	10.0	25.0	25.0
60	9.0	7.5	15.0	15.0	14.0	14.0	20.0	20.0
65	20.0	20.0	20.0	20.0	25.0	25.0	50.0	50.0
70	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

\* For Group 1 and 2 members hired on or after April 2, 2012, probability of retirement is 0% until retirement eligibility.

<sup>1</sup> For consistency with the pension plan of which these participants are members, these assumptions are based on those used for the SERS Actuarial Valuation Report as of January 1, 2022 and experience study issued in 2014.

## Actuarial Assumptions (cont.)

Spouse Age Difference <sup>1</sup>	Females are assumed to be 3 years younger than males. For all retired participants, spouse age is based on actual data.												
Proportion of Retirees Covering a Spouse	60% of active employees are assumed to cover an adult member at retirement. Retirees are assumed to continue their current coverage status (Individual/Family coverage).												
Participation Rate	100% of employees currently electing healthcare coverage are assumed to elect coverage at retirement.  In addition, 35% of employees currently opting out of active employee health coverage are assumed to elect to enroll in retiree coverage. An 8% load was applied to the active liability to estimate the impact of this population. This assumption is based on the percentage of actives and retirees in the OPEB plan vs. SERS and assumes SERS and the OPEB plan have an exact overlap of participant eligibility.  85% of current and future vested terminated participants will elect health care benefits at age 55 or, if later, the participant's current age.  Retirees who currently elect to waive their coverage are assumed to remain uncovered in the future.												
Surviving Spouse Continuing Coverage	100% of spouses are assumed to elect to continue coverage after the retiree's death.												
Health Plan Election	<p>Current non-Medicare eligible retirees and spouses (if covered) under age 65 who are in a POS/PPO plan are assumed to move to an Indemnity plan if they are Medicare eligible at 65. All others are assumed to remain in their currently elected product type (Indemnity/POS/PPO/HMO).</p> <p>Future retirees are assumed to enroll in the existing plans in the same proportion as the current retiree mix, as shown in the table below. These proportions are established separately for non-Medicare and Medicare coverage for each product type and reflects the assumption that Fallon plans' (HMO) members will migrate to the UniCare Plus plan (PPO).</p> <table><tr><td></td><td>Under 65</td><td>Age 65+</td></tr><tr><td>Indemnity</td><td>28%</td><td>96%</td></tr><tr><td>POS/PPO</td><td>62%</td><td>0%</td></tr><tr><td>HMO</td><td>10%</td><td>4%</td></tr></table>		Under 65	Age 65+	Indemnity	28%	96%	POS/PPO	62%	0%	HMO	10%	4%
	Under 65	Age 65+											
Indemnity	28%	96%											
POS/PPO	62%	0%											
HMO	10%	4%											
Medicare Eligibility	<p>Current non-Medicare eligible retirees and spouses (if covered) over age 65 are assumed to remain non-Medicare eligible.</p> <p>Current Medicare eligible retirees and spouses (if covered) under age 65 are assumed to remain Medicare eligible.</p> <p>All other retirees and spouses (if covered) are assumed to be non-Medicare eligible prior to age 65 and Medicare eligible at age 65, unless their spouse is over age 65 and non-Medicare eligible.</p>												

<sup>1</sup> For consistency with the pension plan of which these participants are members, these assumptions are based on those used for the SERS Actuarial Valuation Report as of January 1, 2022 and experience study issued in 2014.

## Actuarial Assumptions (cont.)

### Benefit Assumptions

Per Capita Claims Costs	The per capita claims costs used in the valuation were developed from the Fiscal Year 2023 premiums which represents the expected claims costs and administrative expenses effective July 1, 2022. The Fiscal Year 2023 premiums appropriately reflect any COVID-19 effect and therefore were not adjusted. Adjustments were made to offset cross-subsidizations between products and coverage tiers.					
	The first-year per capita claims costs below are on a “net basis” – they reflect plan costs after reduction from the total benefit costs of the member cost-sharing (deductibles, coinsurance, co-pays, provider savings, Medicare, etc.). These claims were blended based on the current enrollment mix by plan (see Health Plan Election section above), separately for the non-Medicare eligible and Medicare eligible population, resulting in an average claims cost per member.					
	Age-graded claims were developed to project the increases in costs related to aging for retirees, spouses, and surviving spouses. Average claims costs associated with the Medicare Indemnity and Non-Medicare plans were age-graded using the retiree age and gender distribution. The aging factors are based on the Society of Actuaries age-curve study “Health Care Costs—From Birth to Death.” The Medicare Advantage HMO Plan was not age-graded as “the age-independent cost curve created by federal subsidies supports the practice of not age-rating the premiums for these individual or group MA, MA-PD, or stand-alone Medicare Part D drug plans.”* These claims costs are the basis for projecting the gross cost for each individual, before member contributions for coverage. Future year per capita costs were projected by applying trend assumptions to the first-year costs.					
	2022 Annual Per Capita Claims Costs					
	Age	Non-Medicare Indemnity	Non-Medicare PPO	Non-Medicare HMO	Medicare Indemnity	Medicare HMO
	45	\$ 7,461	\$ 7,708	\$ 7,055	\$ 3,260	\$ 3,724
	50	9,094	9,395	8,599	3,260	3,724
	55	11,161	11,531	10,553	3,260	3,724
	60	13,637	14,088	12,894	3,260	3,724
	65	17,038	17,602	16,109	3,260	3,724
70	20,468	21,146	19,353	3,602	3,724	
75	24,238	25,041	22,918	3,887	3,724	
80	28,167	29,100	26,633	4,097	3,724	
85	32,027	33,088	30,282	4,196	3,724	
90	35,452	36,626	33,521	4,187	3,724	
95	37,383	38,621	35,346	4,065	3,724	
	* Actuarial Standard of Practice (ASOP) No. 6 Practice Note: Development of Age-Specific Retiree Health Cost Assumptions, Including Applications to Pooled and Non-Pooled Health Plans (www.actuary.org/sites/default/files/2021-03/ASOP_No_6_Practice_Note.pdf).					
Expenses	Per Capita Claims Costs were developed to include administrative expenses.					

## Actuarial Assumptions (cont.)

Trend Rates	<p>The trend rates illustrated below are used to project age-graded claims and flat rates into future years. Trend rates were developed based on the most recently published SOA-Getzen trend rate model, version 2022_f4. The short-term trend assumptions were based on a review of the Commonwealth's historical trend rates during fiscal years 2021-2022, along with industry surveys, separately for non-Medicare and Medicare benefits. The industry surveys were used to predict short-term future per capita cost increases. The most recently published SOA Getzen model was then used to determine the trend rates beginning in 2023 and thereafter, based on the plan's long-term inflation assumption and reasonable macro-economic assumptions for the growth of health care expenditures during this period relative to the general economy.</p> <p>The short-term trend rates also reflect an estimated impact of recent general inflation. CPI-U for the 12-month period ending in May 2022 was 8.5%. Based on historical information available regarding how general inflation impacts medical inflation, 60% of the increase in general inflation (over the long-term assumption of 2.50%) is assumed to be reflected in higher medical costs. Based on historical observations of CPI-U for medical care lagging general CPI-U, this increase is spread out over a two-year period, in 2023 and 2024.</p> <table><tr><th>Year</th><th>Medicare Benefits</th><th>Non-Medicare Benefits</th></tr><tr><td>2022</td><td>5.00%</td><td>7.60%</td></tr><tr><td>2023</td><td>6.80%</td><td>9.11%</td></tr><tr><td>2024</td><td>6.79%</td><td>8.82%</td></tr><tr><td>2025</td><td>4.99%</td><td>6.72%</td></tr><tr><td>2026</td><td>4.99%</td><td>6.43%</td></tr><tr><td>2031</td><td colspan="2">4.97%</td></tr><tr><td>2041</td><td colspan="2">4.78%</td></tr><tr><td>2051</td><td colspan="2">4.62%</td></tr><tr><td>2061</td><td colspan="2">4.53%</td></tr><tr><td>2071</td><td colspan="2">4.15%</td></tr><tr><td>2075+</td><td colspan="2">3.94%</td></tr></table> <p>Getzen long run growth factors assumptions:</p> <ul style="list-style-type: none"><li>• Inflation: 2.5%</li><li>• Real GDP Growth: 1.4%</li><li>• Excess Medical Growth: 1.0%</li></ul>	Year	Medicare Benefits	Non-Medicare Benefits	2022	5.00%	7.60%	2023	6.80%	9.11%	2024	6.79%	8.82%	2025	4.99%	6.72%	2026	4.99%	6.43%	2031	4.97%		2041	4.78%		2051	4.62%		2061	4.53%		2071	4.15%		2075+	3.94%	
Year	Medicare Benefits	Non-Medicare Benefits																																			
2022	5.00%	7.60%																																			
2023	6.80%	9.11%																																			
2024	6.79%	8.82%																																			
2025	4.99%	6.72%																																			
2026	4.99%	6.43%																																			
2031	4.97%																																				
2041	4.78%																																				
2051	4.62%																																				
2061	4.53%																																				
2071	4.15%																																				
2075+	3.94%																																				
Model Use	<p>Actuarial Standard of Practice No. 56 – Modeling requires disclosure of certain information regarding the actuary's use of models when issuing actuarial reports for work performed on or after October 1, 2020. For this valuation, the liability calculations were determined using industry-leading defined benefit valuation software developed and maintained by a third-party vendor. The model was designed specifically for the measurement of defined benefit pension and postretirement medical plan liabilities and the actuary has updated the applicable parameters for the specific plan provisions and assumptions selected for this valuation.</p> <p>The medical inflation trend rate assumptions were set using the Getzen Model of Long-Run Medical Cost Trends ("Getzen Model"), which adds transparency to the economic assumptions behind medical and prescription drug trends. The Getzen Model is an excel based projection of expected growth rates in medical premiums and expenditures from 2026 to 2101. Development of the model was sponsored by the Society of Actuaries, and it is used primarily in the estimation of reportable liabilities for retiree health benefits in accordance with FASB and GASB standards. It projects medical care cost increases and the health share of GDP for the next 80 years using linked formulas and assumptions developed by the author, Professor Thomas Getzen, with the assistance of a Society of Actuaries project oversight group.</p>																																				
Changes in Assumptions	<p>Please see the Actuarial Experience section of this report for the changes and their impacts.</p>																																				

## Rationale for Assumptions

<b>Discount Rate</b>	The single discount rate was based on the long-term expected rate of return on SRBT investments of 7.00% and a municipal bond rate of 3.54% (based on the 20-year Bond Buyer GO Index as of the end of June 2022). Based on the stated assumptions and the projection of cash flows, the Plan's Fiduciary Net Position and future contributions were not sufficient to finance the future benefit payments of the current plan members. Therefore, the long-term expected rate of return on SRBT investments was applied to projected benefit payments through year 2042 and the municipal bond rate was applied to all remaining future years to determine the Total OPEB Liability. The projection of cash flows used to determine the single discount rate for each fiscal year end assumed that employer contributions will be made based on the current funding policy for future years.
<b>Long-Term Expected Rate of Return, Inflation, Payroll Growth, Salary Scale, Mortality, Disability Incidence, Withdrawal, Retirement and Spouse Age Difference</b>	Consistent with the assumptions used for the SERS Actuarial Valuation Report as of January 1, 2022 and experience study issued in 2014. SERS last updated the mortality projection scale in the January 1, 2021 SERS actuarial valuation to MP-2020.
<b>Proportion of Retirees Covering a Spouse</b>	This assumption is based on the experience of the retiree population in 2015-2018. Due to the level of benefits, employees in this program are not expected to change their behavior upon retirement.
<b>Participation Rate – Employees</b>	This assumption is based on the percentage of actives and retirees in the OPEB plan vs. SERS and assumes SERS and OPEB have an exact overlap of participant eligibility.

## Development of June 30, 2022 Discount Rate

### Projection of Contributions

(All dollar amounts are in thousands)

Year Ending June 30	Total Employer Contributions	Contributions Related to Service	Employer
		Cost of Future Employees*	Contributions for Current Participants
	(a)	(b)	(c) = (a)-(b)
2023	617,059	25,535	591,524
2024	662,950	49,840	613,110
2025	715,334	72,316	643,018
2026	762,428	93,677	668,751
2027	803,579	115,019	688,560
2028	845,065	138,926	706,139
2029	884,984	166,585	718,399
2030	922,633	190,709	731,924
2031	959,460	214,909	744,551
2032	994,490	240,287	754,203
2033	1,027,177	269,321	757,856
2034	1,057,470	300,558	756,912
2035	1,085,630	329,005	756,625
2036	1,111,818	357,838	753,980
2037	1,137,714	386,582	751,132
2038	1,164,993	420,147	744,846
2039	1,192,945	455,525	737,420
2040	1,221,699	488,702	732,997
2041	1,251,036	522,750	728,286
2042	1,279,241	557,931	721,310
2043	1,306,337	596,666	709,671
2044	1,333,707	637,103	696,604
2045	1,359,059	676,226	682,833
2046	1,381,164	715,370	665,794
2047	1,399,296	756,458	642,838
2048	1,413,794	801,059	612,735
2049	1,423,612	848,760	574,852
2050	1,425,187	894,696	530,491
2051	1,419,887	941,795	478,092
2052	1,405,579	990,124	415,455

\* Determined using an open group valuation assuming a level population.

## Development of June 30, 2022 Discount Rate (cont.)

### Projection of Fiduciary Net Position

(All dollar amounts are in thousands)

Year Ending June 30	Beginning Fiduciary Net Position	Employer Contributions for Current Participants	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 7.00%	Ending Fiduciary Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
2023	1,988,383	591,524	567,059	240	138,300	2,150,908
2024	2,150,908	613,110	612,950	246	148,840	2,299,662
2025	2,299,662	643,018	665,334	231	158,480	2,435,595
2026	2,435,595	668,751	712,428	200	167,262	2,558,980
2027	2,558,980	688,560	753,579	161	175,165	2,668,965
2028	2,668,965	706,139	795,065	121	182,043	2,761,961
2029	2,761,961	718,399	834,984	85	187,602	2,832,893
2030	2,832,893	731,924	872,633	55	191,739	2,883,868
2031	2,883,868	744,551	909,460	33	194,475	2,913,401
2032	2,913,401	754,203	944,490	18	195,670	2,918,766
2033	2,918,766	757,856	977,177	9	195,046	2,894,482
2034	2,894,482	756,912	1,007,470	4	192,272	2,836,192
2035	2,836,192	756,625	1,035,630	2	187,213	2,744,398
2036	2,744,398	753,980	1,061,818	1	179,795	2,616,354
2037	2,616,354	751,132	1,087,714	-	169,843	2,449,615
2038	2,449,615	744,846	1,114,993	-	157,017	2,236,485
2039	2,236,485	737,420	1,142,945	-	140,880	1,971,840
2040	1,971,840	732,997	1,171,699	-	121,213	1,654,351
2041	1,654,351	728,286	1,201,036	-	97,818	1,279,419
2042	1,279,419	721,310	1,229,241	-	70,362	841,850
2043	841,850	709,671	1,256,337	-	38,399	333,583
2044	333,583	696,604	1,283,707	-	1,429	-
2045	-	682,833	1,309,059	-	-	-
2046	-	665,794	1,331,164	-	-	-
2047	-	642,838	1,349,296	-	-	-
2048	-	612,735	1,363,794	-	-	-
2049	-	574,852	1,373,612	-	-	-
2050	-	530,491	1,375,187	-	-	-
2051	-	478,092	1,369,887	-	-	-
2052	-	415,455	1,355,579	-	-	-

## Development of June 30, 2022 Discount Rate (cont.)

### Development of the Single Discount Rate

(All dollar amounts are in thousands)

Year Ending June 30	Beginning Fiduciary Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments at 7.00%	Present Value of Unfunded Benefit Payments at 3.54%	Present Value of Benefit Payments Using the Single Discount Rate of 4.30%
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
2023	1,988,383	567,059	567,059	-	548,197	-	555,251
2024	2,150,908	612,950	612,950	-	553,795	-	575,452
2025	2,299,663	665,334	665,334	-	561,798	-	598,889
2026	2,435,596	712,428	712,428	-	562,209	-	614,852
2027	2,558,980	753,579	753,579	-	555,778	-	623,564
2028	2,668,965	795,065	795,065	-	548,014	-	630,780
2029	2,761,961	834,984	834,984	-	537,878	-	635,149
2030	2,832,894	872,633	872,633	-	525,356	-	636,433
2031	2,883,867	909,460	909,460	-	511,707	-	635,956
2032	2,913,401	944,490	944,490	-	496,651	-	633,233
2033	2,918,766	977,177	977,177	-	480,224	-	628,149
2034	2,894,482	1,007,470	1,007,470	-	462,721	-	620,932
2035	2,836,192	1,035,630	1,035,630	-	444,536	-	611,983
2036	2,744,397	1,061,818	1,061,818	-	425,960	-	601,599
2037	2,616,354	1,087,714	1,087,714	-	407,803	-	590,874
2038	2,449,614	1,114,993	1,114,993	-	390,682	-	580,731
2039	2,236,484	1,142,945	1,142,945	-	374,277	-	570,757
2040	1,971,839	1,171,699	1,171,699	-	358,591	-	561,002
2041	1,654,350	1,201,036	1,201,036	-	343,523	-	551,350
2042	1,279,418	1,229,241	1,229,241	-	328,589	-	541,042
2043	841,849	1,256,337	-	1,256,337	-	615,728	530,179
2044	333,583	1,283,707	-	1,283,707	-	607,632	519,404
2045	-	1,309,059	-	1,309,059	-	598,447	507,834
2046	-	1,331,164	-	1,331,164	-	587,746	495,127
2047	-	1,349,296	-	1,349,296	-	575,384	481,188
2048	-	1,363,794	-	1,363,794	-	561,682	466,315
2049	-	1,373,612	-	1,373,612	-	546,384	450,316
2050	-	1,375,187	-	1,375,187	-	528,308	432,253
2051	-	1,369,887	-	1,369,887	-	508,279	412,842
2052	-	1,355,579	-	1,355,579	-	485,774	391,694
2053	-	1,331,816	-	1,331,816	-	460,941	368,968
2054	-	1,303,388	-	1,303,388	-	435,679	346,211
2055	-	1,269,417	-	1,269,417	-	409,816	323,291
2056	-	1,229,098	-	1,229,098	-	383,233	300,123
2057	-	1,186,348	-	1,186,348	-	357,257	277,746
2058	-	1,141,984	-	1,141,984	-	332,139	256,341
2059	-	1,096,151	-	1,096,151	-	307,909	235,913
2060	-	1,049,365	-	1,049,365	-	284,689	216,536
2061	-	1,006,899	-	1,006,899	-	263,829	199,211
2062	-	974,368	-	974,368	-	246,576	184,830



## Development of June 30, 2022 Discount Rate (cont.)

### Development of the Single Discount Rate

(All dollar amounts are in thousands)

Year Ending June 30	Beginning Fiduciary Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments at 7.00%	Present Value of Unfunded Benefit Payments at 3.54%	Present Value of Benefit Payments Using the Single Discount Rate of 4.30%
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
2063	-	946,637	-	946,637	-	231,368	172,169
2064	-	921,683	-	921,683	-	217,567	160,722
2065	-	900,974	-	900,974	-	205,407	150,636
2066	-	882,320	-	882,320	-	194,277	141,438
2067	-	863,193	-	863,193	-	183,567	132,669
2068	-	842,644	-	842,644	-	173,070	124,174
2069	-	820,640	-	820,640	-	162,788	115,947
2070	-	797,069	-	797,069	-	152,707	107,976
2071	-	771,828	-	771,828	-	142,815	100,248
2072	-	744,896	-	744,896	-	133,119	92,762
2073	-	716,274	-	716,274	-	123,628	85,522
2074	-	685,997	-	685,997	-	114,354	78,532
2075	-	654,162	-	654,162	-	105,319	71,801
2076	-	620,867	-	620,867	-	96,541	65,338
2077	-	586,387	-	586,387	-	88,062	59,166
2078	-	551,004	-	551,004	-	79,919	53,305
2079	-	514,890	-	514,890	-	72,128	47,758
2080	-	478,254	-	478,254	-	64,705	42,532
2081	-	441,339	-	441,339	-	57,669	37,632
2082	-	404,417	-	404,417	-	51,038	33,062
2083	-	367,788	-	367,788	-	44,828	28,829
2084	-	331,777	-	331,777	-	39,057	24,934
2085	-	296,706	-	296,706	-	33,734	21,380
2086	-	262,895	-	262,895	-	28,868	18,163
2087	-	230,659	-	230,659	-	24,462	15,279
2088	-	200,276	-	200,276	-	20,514	12,720
2089	-	171,993	-	171,993	-	17,014	10,473
2090	-	146,015	-	146,015	-	13,951	8,525
2091	-	122,477	-	122,477	-	11,302	6,856
2092	-	101,453	-	101,453	-	9,042	5,445
2093	-	82,956	-	82,956	-	7,140	4,269
2094	-	66,934	-	66,934	-	5,564	3,302
2095	-	53,263	-	53,263	-	4,276	2,520
2096	-	41,764	-	41,764	-	3,239	1,894

## Development of June 30, 2022 Discount Rate (cont.)

### Development of the Single Discount Rate

(All dollar amounts are in thousands)

Year Ending June 30	Beginning Fiduciary Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments at 7.00%	Present Value of Unfunded Benefit Payments at 3.54%	Present Value of Benefit Payments Using the Single Discount Rate of 4.30%
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
2097	-	32,247	-	32,247	-	2,415	1,402
2098	-	24,503	-	24,503	-	1,772	1,022
2099	-	18,304	-	18,304	-	1,279	732
2100	-	13,426	-	13,426	-	906	515
2101	-	9,662	-	9,662	-	630	355
2102	-	6,817	-	6,817	-	429	240
2103	-	4,712	-	4,712	-	286	159
2104	-	3,188	-	3,188	-	187	103
2105	-	2,111	-	2,111	-	120	66
2106	-	1,367	-	1,367	-	75	41
2107	-	865	-	865	-	46	25
2108	-	535	-	535	-	27	15
2109	-	324	-	324	-	16	8
2110	-	191	-	191	-	9	5
2111	-	111	-	111	-	5	3
2112	-	63	-	63	-	3	1
2113	-	35	-	35	-	1	1
2114	-	19	-	19	-	1	-
2115	-	10	-	10	-	-	-
2116	-	5	-	5	-	-	-
2117	-	2	-	2	-	-	-
2118	-	1	-	1	-	-	-
2119	-	1	-	1	-	-	-
2120	-	-	-	-	-	-	-
<b>Total</b>					<b>9,418,289</b>	<b>12,018,678</b>	<b>21,436,971</b>

## Glossary

Brief explanations of terms used in this report:

### **Annual OPEB Expense**

The change in Net OPEB Liability less the change in the Deferred Outflows of Resources plus the change in the Deferred Inflows of Resources.

### **Collective deferred outflows of resources and deferred inflows of resources related to OPEB**

Deferred outflows of resources and deferred inflows of resources related to OPEB arising from certain changes in the collective net OPEB liability or collective total OPEB liability.

### **Covered Employee Payroll**

Annual compensation paid (or expected to be paid) to active employees covered by an OPEB plan, in aggregate.

### **Implicit Rate Subsidy**

Many post-employment health plans charge the same premium rates for all participants in a non-Medicare plan regardless of their age. This single premium rate is called a blended premium rate because it blends the expected claims of both active and retired participants. Retirees are generally older than the average participant in a non-Medicare plan, which means they are expected to generate higher claims than the average participant of the plan; therefore, they are receiving a subsidy even if they pay 100% of the blended premium rate because they would be paying less in premiums than their expected claims costs. This subsidy is referred to as the "Implicit Rate Subsidy".

### **Net OPEB Liability (NOL)**

The liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit OPEB plan that is administered through a trust that meets the criteria of the GASB Statements.

### **Normal Cost or Service Cost**

The portion of the Total Present Value of Future Benefits attributed to employee service during the current fiscal year by the actuarial cost method. These terms are used interchangeably.

### **Other Postemployment Benefits (OPEB)**

Retiree health care benefits and post-employment benefits provided separately from a pension plan (excluding termination offers and benefits).

### **Fiduciary Net Position (FNP)**

Set equal to the market value of assets as of the measurement date

### **Present Value of Future Benefits (PVFB)**

The value, as of the valuation date, of the projected benefits payable to all members for their accrued service and their expected future service, discounted to reflect the time value (present value) of money and adjusted for the probabilities of retirement, withdrawal, death and disability.

### **Total OPEB Liability (TOL)**

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service in conformity with the GASB Statements. The total OPEB liability is the liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit OPEB plan that is not administered through a trust that meets the criteria of the GASB Statements.